

**CLAIM AMENDMENTS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:

inquiring, from a remote location, a status of an upper-layer communication indicator, the upper-layer communication indicator displayed at a transceiver customer premise equipment (CPE) device, wherein the status is observable by a visual inspection of the upper-layer communication indicator by an end-user, and wherein the status of the upper-layer communication indicator indicates an Open Systems Interconnection (OSI) layer 4 or above communication status;

entering the status into data storage;

performing a first set of actions when the status indicates valid upper-layer communication; and

performing a second set of actions when the status indicates invalid upper-layer communication.

2. (Currently Amended) The method, as recited in claim 1, ~~wherein the CPE device is a transceiver and~~ wherein the inquiring comprises:

a service technician from the remote location requesting the end-user to provide the status of a light emitting diode (LED) on a Digital Subscriber Loop (DSL) transceiver.

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Previously Presented) The method, as recited in claim 1, wherein performing the second set of actions comprises a service technician advising the end-user to perform a corrective action to a local configuration.

7. (Original) The method, as recited in claim 1, wherein performing the second set of actions comprises a service technician performing a corrective action at the remote location.

8. (Currently Amended) The method, as recited in claim 1, wherein performing the first set of actions comprises sending a service technician to a location of the end-user ~~location~~ to perform a set of troubleshooting actions.

9. (Currently Amended) A transceiver positioned at a local location, the transceiver comprising:  
a connection port configured to communicate data signals from a computer positioned at  
a the local location to a remotely located service provider device, and a first status  
indicator configured for visual inspection by an end-user to communicate at least  
an Open Systems Interconnection (OSI) layer 4 ~~3~~ or above communication status  
between the computer and the service provider device.

10. (Cancelled).

11. (Original) The transceiver, as recited in claim 9, wherein the service provider device is a Digital Subscriber Loop Access Multiplexer (DSLAM).

12. (Currently Amended) The transceiver, as recited in claim 9, further comprising:  
a second status indicator configured to visually indicate an OSI layer 2 connection status  
between the computer and the remotely located service provider device.

13. (Original) The transceiver, as recited in claim 12, wherein the second status indicator is a wide area network status indicator.

14. (Currently Amended) The transceiver, as recited in claim 9, further comprising: a second status indicator configured to visually indicate an OSI layer 1 status of the transceiver.

15. (Original) The transceiver, as recited in claim 14, wherein the second status indicator is a power status indicator.

16. (Currently Amended) A method of digital subscriber line service maintenance, the method comprising:

detecting a digital subscriber line (DSL) related troubleshooting event at a remote service terminal that supports an end-user computer having a DSL connection at a local site;

inquiring, from the remote service terminal, a status of a visual upper-layer communication indicator, the visual upper-layer communication indicator displayed at a customer premise equipment (CPE) device and associated with a digital subscriber line (DSL) terminating at the DSL connection of the end-user computer at the local site; wherein the status is observable by a visual inspection of the visual upper-layer communication indicator by an end-user, and wherein the visual upper-layer communication indicator indicates an Open Systems Interconnection (OSI) layer 4 or above communication status;

entering the status of the visual upper-layer communication indicator into data storage coupled to the remote service terminal in connection with the DSL related troubleshooting event;

performing a first set of maintenance actions when the status indicates valid upper-layer communication; and

performing a second set of maintenance actions when the status indicates invalid upper-layer communication.

17. (Cancelled).

18. (Cancelled).

19. (Previously Presented) The method, as recited in claim 16, wherein performing the first set of maintenance actions, but not the second set of maintenance actions, comprises sending a service technician to the end-user location to perform a set of troubleshooting actions on the end-user computer.

20. (New) The method of claim 1, wherein the OSI layer 4 or above communication status includes a security function status.

21. (New) The method of claim 1, wherein the OSI layer 4 or above communication status includes a name recognition function status.

22. (New) The method of claim 1, wherein the OSI layer 4 or above communication status includes a login function status.

23. (New) The method of claim 1, wherein the OSI layer 4 or above communication status includes an administration function status.

24. (New) The method of claim 1, wherein the OSI layer 4 or above communication status includes an encryption function status.

25. (New) The method of claim 1, wherein the OSI layer 4 or above communication status includes a file formatting function status.